DOCUMENT RESUME

ED 131 191 CE 007 552

TITLE	Minimum Levels of Technical Competency Standards of Business and Office Education Programs in Nebraska. Final Report. June 1, 1973-May 31, 1974.
INSTITUTION	Kearney State Coll., Nebr.
SPONS AGENCY	Nebraska Occupational Needs Research Coordinating Unit, Lincoln.; Nebraska State Dept. of Education, Lincoln. Div. of Vocational Education.
PUB DATE	[74]
NOTE	57p.
EDRS PRICE	MF-$0.83 HC-$3.50 Plus Postage.
DESCRIPTORS	Accounting; Business Administration; *Business Education; *Business Skills; Business Subjects; Communication Skills; *Job Skills; *Occupational Information; *Office Occupations Education; Resource Materials; Secondary Education; Teaching Guides; Typewriting
IDENTIFIERS	Nebraska

ABSTRACT

Aims and objectives of business and office education are discussed in preface to six guides intended to assist business teachers in planning learning activities and developing strategies to prepare students for entry level positions. These guides are presented for the following areas: (1) Accounting and computing, (2) filing, office machines, and general office clerical, (3) information communication, (4) stenographic, secretarial, and related, (5) supervisory and administrative management, and (6) typing and related. The guides can be used independently as a self-contained document, or in conjunction with other school objectives or class programs; however they do not include teaching method materials or evaluation. Each guide contains a U.S. Office of Education classification number, a description of work activities, general worker requirements, and competencies identified as necessary for the particular area. Bibliographies, citing references relevant to business and office education curriculum development, are appended. (TA)

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FINAL REPORT
VOCATIONAL EDUCATION RESEARCH PROJECT
Vocational Education Amendments of 1968
(Public Law 90-576)

MINIMUM LEVELS OF TECHNICAL COMPETENCY STANDARDS OF BUSINESS AND OFFICE EDUCATION PROGRAMS IN NEBRASKA

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION

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INTRODUCTION

The business teacher must continually evaluate his objectives and methods in terms of student comprehension. With the overwhelming quantity of facts and new information constantly coming into the educational arena, the business teacher finds an almost insurmountable task--What are the main objectives of a program for entry level skills and for professional development; how can the teacher help them with the limited amount of time available for the student-teacher relationship?

Toffler, in **Future Shock**, talks about the constant change in our society. This force of change, far from abating, now appears to be gathering momentum. Our question then, in Business Education is, "What is the role of the Business Educators in order to meet the deluge of ever-changing information and facts?"

In order to help the business teacher in this task, these curriculum guides identify minimum levels of technical competencies needed by the Nebraska student in business and office education. These guides have been prepared with the help of competent business management personnel, business employees, and business education teachers. The funds that made this guide a reality were provided through a federal research grant in cooperation with the Nebraska State Board of Vocational Education and sponsored by the Nebraska Research Coordinating Unit.

AIMS AND OBJECTIVES OF BUSINESS AND OFFICE EDUCATION

I. BUSINESS EDUCATION AND THE NEEDS OF ALL STUDENTS

An enormously large percentage (30 percent) of those enrolled in high schools in the United States do not graduate; more than half of the high school graduates do not enroll in college; a large percentage of the college enrollees do not finish four years. These facts make clear that each year millions of high school dropouts, high school graduates who have no plans for further schooling, and college dropouts come into the employment market--too often without training or ability to obtain or hold a job. "...if all high school graduates (or dropouts) who do not continue fulltime study after leaving high school were to receive appropriate occupational education while in high school, then we could expect that the number involved in such programs might be more."

II. GUIDANCE

A. Guidance personnel should be aware of the philosophy of Business Education, the course offerings, and their prerequisites in order to counsel all students in course and curriculum selection, job opportunities, and advanced education. Guidance personnel should consider the Department of Business Education as a flexible one which can offer subjects to students of all curricula and abilities.

B. Guidance personnel should work closely with business educators to coordinate the best programs for all students. When properly aligned these courses will enable students to meet college admission requirements and at the same time acquire marketable skills for employment.

C. Individualized programs, wherever practical and desirable, might be designed to meet the needs, interest, and the aptitudes of the lower-ability students.

D. Guidance personnel should be aware of local employment opportunities, trends, and requirements. (Also, career counseling for the Business Education students should be as exciting, flexible, and timely as that for the college bound students.)

III. GENERAL EDUCATION VALUE

There is general education value in the basic business subjects. Young adults of today must be aware of their privileges and accompanying responsibilities in an American business enterprise system.

IV. CHARACTER DEVELOPMENT

A. Total programs and course offerings will provide for the development of future business employees; i.e., personality, grooming, character, and human relations.

B. Development of good work habits, positive attitudes toward responsibility, ethical values, and a sense of conscience are vital.

C. Adaptability to a variety of social challenges in everyday life should be encouraged to ease the student's entrance into the world in which he will relate as both citizen and neighbor.

V. ABILITY TO THINK LOGICALLY AND TO COMMUNICATE EFFECTIVELY

A. The development of logical thinking is one of the most important contributions which Business Education makes toward the

educational growth of the student. The business teacher has many opportunities to develop the powers of logical thinking through course assignments and discussions, resulting in a logical approach to other situations.

B. Since accuracy and clarity of thought and expression are paramount for the successful conduct of American business enterprise, emphasis on the growth of oral and written communication skills--a primary aim of all education--should be constantly emphasized in the teaching and learning of business subjects.

VI. PREPARATION FOR OFFICE WORK

A. Diversified programs should be available in keeping with the wide range of abilities, interests, and experiences of high school students in the community. Specific office skills with their related knowledges, understandings, and appreciations should consciously include requirements for advancement in job placement, as well as initial levels of employment. Classroom standards for initial levels of employment should include those essentials for employment immediately after graduation, with no need for further training prior to employment. Such total preparatory programs in "occupational education...will assist the working forces of Nebraska and America to be competent, to meet individual, state, and national occupational needs."

B. Computational skills in the fundamental processes of addition, subtraction, multiplication, and division should be reviewed and brought to a high level of proficiency and accuracy.

C. The office skills of stenography, typewriting, and the operation of business machines should be developed to meet standards mutually established by the Department of Business Education and its advisory committee.

D. A working knowledge of the bookkeeping accounting cycle should be developed to assure the business community of a skilled employee. An understanding of data processing concepts should be fostered, together with a hands-on knowledge of data processing equipment if possible.

VII. PERSONAL USE

Many of the business subjects have personal, as well as occupational, value; therefore, the high school Business Education program should provide an opportunity for all students to develop skills and knowledges for personal application.

VIII. COOPERATIVE WORK EXPERIENCE

Supplementary, cooperative work programs, where feasible should be provided for Business Education students to give them the opportunity for practical work experience in offices of the local community or of the school system.

IX. OPPORTUNITIES FOR EMPLOYMENT

A. Early in the high school program, students should be alerted to the variety of opportunities where "educational and occupational training at the high school level is indicated."

B. High school instruction should reflect the new and rewarding opportunities introduced by this age of automation.

C. Consideration of initial job opportunities will not be the only objective of planned, instructional programs; preparation for advancement on the job will receive special consideration.

D. A realistic image of business and a proper "attitude toward work should be developed early in the life of a child" and conveyed to the high school students as they make their meaningful decisions for a career.

X. ADVISORY COMMITTEE ON BUSINESS EDUCATION

A. Local advisory committees, composed of business educators and businessmen, should be formed for the purpose of working cooperatively to strengthen the high school Business Education courses.

B. Matters of curricular revision, purchase of equipment, school-community relations, employment practices, and the promotion of constructive legislation for vocational education should be of dual concern to businessmen and business educators.

XI. BUSINESS EDUCATION - A BASIS FOR FURTHER STUDY

The high school Business Education curriculum should offer intensive courses in areas of bookkeeping / accounting, data processing, secretarial, office machines and basic business subjects for able students, which will provide the opportunities for advanced standing in college through college placement tests. Such courses should be available for capable students who are enrolled in either Business Education or college preparatory programs.

XII. BUSINESS TEACHER TRAINING

Future teachers of Business Education received initial interest in teaching business subjects through exposure to high school courses in Business Education. These students should be guided by alert business teachers and guidance personnel into combination programs which will provide, in addition to selected business subjects, courses designed to meet college entrance requirements, as well as success on college board examinations.

RESEARCH DESIGN

The following format was followed for the duration of the project in the formulation of technical competencies in Business and Office Education:

1. Established the sample of (1) Business and Office educators, (2) Business and Office employees, and (3) Businessmen.
2. Research in six business and office areas (Accounting and Computing; Filing, Office Machines, and General Office Clerical; Information Communication; Stenographic, Secretarial and Related; Supervisory and Administrative Management; and Typing and Related) has been conducted with the help of information previously compiled from other sources.
   - 2a. State Departments of Education
   - 2b. State Research Coordinating Units
   - 2c. Government publications
   - 2d. Technical magazines and books
   - 2e. Commercial publishers
3. Selected state curriculum development consultants to lend expertise toward the development of coordinated state-wide curricula guidelines for all levels of business and office education. These included:
   - 3a. One representative consultant from each of the four state colleges:
     - Dr. Sam Reno, Kearney State College
     - Miss Patricia Rhoades, Wayne State College
     - Mr. Jack Hamilton, Peru State College
     - Mr. Charles L. Cressy, Chadron State College
   - 3b. One representative consultant from the two-year vocational-technical schools and colleges:
     - Mr. Lavern Franzen, Central Nebraska Technical College

3c. One representative from the University of Nebraska at Omaha: Miss Verda Rauch

3d. One representative from the University of Nebraska at Lincoln: Dr. Margaret Johnson

3e. The Administrative Consultant from the Business and Office Vocational Education Department: Mrs. Ann Masters

3f. The Administrative Consultant from the state Vocational Education Professional Development Department: Dr. Jim Osborne

4. Prepared card-sort curriculum decks composed of identified technical competencies for each representative occupational area.
   4a. Established juries to select individual card-sort items for dissemination to respondents.
   4b. Disseminated card-sort curriculum decks to respondents.
5. Conducted a total of 175 personal interviews with business employees, business supervisors, and business educators throughout the state.
6. Analyzed and developed curriculum guidelines for the six areas and levels of business and office education.
   6a. Reproduced guidelines for dissemination.
   6b. Disseminated curriculum guidelines to all appropriate programs within the state.
7. Submitted the results of the study to consultants, the State Board of Vocational Education, and the Nebraska Research Coordinating Unit for evaluation and final review.

USE OF GUIDES

These guides are intended to assist Nebraska business teachers in planning learning activities and developing strategies to prepare students for entry level positions in the following six areas:

1. Accounting and Computing
2. Filing, Office Machines, and General Office Clerical
3. Information Communication
4. Stenographic, Secretarial, and Related
5. Supervisory and Administrative Management
6. Typing and Related

These guidelines can be used as a self-contained document which may be used independently or in conjunction with other school objectives or class programs. The guides do not include teaching method materials or evaluation.

Guides can be used to aid secondary school institutions in establishing course patterns and or organizing business departments. The guides may also be utilized as a standard to alleviate weaknesses that could be indicated by faculty evaluations. They can be used to give the "teacher reinforcement in that he or she is going in the right direction. . .", and whether the content being utilized is current and parallel with local needs.

SUMMARY

In a rapidly changing social and business environment, the Business Education Department **should be responsive** to current trends in employment! The Business Education Department should also be adaptive to the demands of the prospective employer, as well as the prospective employee, and to the projected future needs of business and government. For the teacher and student who would be knowledgeable about the changing field of employment, a program including the following recommended activities may be helpful:

A. Contacts with personnel managers

B. Follow-up studies of recent graduates and employers

C. Field trips to businesses for personal observation of methods, facilities, and pertinent facts of employment

D. Courses, seminars, workshops, and on-the-job experience for teachers of business subjects

E. Implementation of recommendations from Advisory Committees

F. Close alliance with the State Department of Education through the State Supervisor of Business Education

ACCOUNTING AND COMPUTING— U. S. Office of Education Classification 14.01, 14.02.

Work Activities in this group involve performing arithmetic computations and preparing numerical records with the aid of typewriting, adding, billing, bookkeeping, and calculating machines. Typical activities are computing wages and interest, production tasks, totaling bank deposit slips and verifying computations recorded in accounts--activities encompass computing, classifying, and recording numerical dates for future analysis.

General Worker Requirements Intellectual capacity and interest sufficient to acquire an understanding of systematic, numerical record keeping and data gathering procedures; ability to apply arithmetic principles and correct computational errors; form perception, eye-hand coordination and finger and manual dexterity.

This division includes occupations concerned with systematizing information about transactions and activities into accounts and quantitative records, and paying and receiving money. These sets of financial records are concerned primarily with bookkeeping machines, computing machines, and account-recording machines.

Examples of initial entry jobs:

1. Full charge Bookkeepers—(professional office, small business)
2. General Bookkeepers—(professional office, small business)
3. Accounting Machine Operator
4. Accounts Payable and or Receivable Bookkeeper
5. Interest—Accrual Bookkeeper
6. Insurance Clerk
7. Trust Bookkeeper
8. Bookkeeping Machine Operator
9. Cost Clerk
10. General Clerk
11. Order Clerk
12. Payroll Clerk

Advanced jobs beyond initial entry:

1. Night Auditor, Auditor
2. Accountant
3. Chief Accountant
4. Comptroller
5. Credit Manager
6. Office Manager
7. Systems Consultant
8. Tax Accountant
9. Treasurer

COMPETENCIES--ACCOUNTING AND COMPUTING

The following competencies have been identified by business educators, business supervisors and administrators, and business employees as being necessary for this particular area:

THE STUDENT WILL BE ABLE TO:

1. Identify the three different types of businesses: proprietorship, partnership, and corporation.
2. Compare and explain the major implications in accounting in the capital section for the above named three.
3. Define and explain specific accounting terms; i.e. asset, liability, capital, ledger, journal, expense, income, cycle billing, short term, and long term.
4. Define a business transaction.
5. Apply the rules for debiting and crediting accounts for increases and decreases in that account.
6. Define the accounting equation and describe how the income and expense items change the equation.
7. Classify different accounts; i.e. capital, expense, liability, and income and prepare a classified balance sheet and profit and loss statement.
8. Properly open a general ledger account by determining the account number to be assigned and the account title.
9. Post entries from the journal to the general ledger.
10. Journalize adjusting entries from the worksheet to the appropriate journal.
11. Post adjusting entries to the general ledger.
12. Prepare a classified income statement from the worksheet.
13. Prepare a worksheet, six column, eight column, and or ten column given the appropriate data.
14. Post entries from the special journal; i.e. cash receipts journal, cash payments journal, purchasing journal, and the sales journal, to the proper ledger accounts in the general ledger.
15. Construct a classified balance sheet from the worksheet.
16. Journalize closing entries using as a basis the worksheet.
17. Post the closing entries to the proper accounts in the general ledger.
18. Balance and rule all general ledger accounts.
19. Prepare a post-closing trial balance.
20. Develop procedures to facilitate the recording of cash transactions such as reconciling the bank statement, deposits and petty cash.
21. Describe the various discounts available and be able to compute and record them; i.e., sales, trade and purchase.
22. Requisition and check invoices, describe how to prepare a requisition, shipping order, purchase order and invoice.

23. Describe and incorporate the different types of inventories (perpetual, periodic, physical).
24. Record various inventory (FIFO, LIFO, Average Cost, etc.) calculations, relating to physical counts, in process, finished goods, spoilage and shrinkage.
25. Explain the various accounts payable transactions; i.e., check writing, discount dates, and schedules.
26. Explain periodic, cycle, and other variations of billing.
27. Prepare monthly billing statements.
28. Record transactions in the special journals and accounts receivable ledger; i.e. purchases, cash receipts, cash payments, sales and bad debts.
29. Compute and journalize sales taxes, purchase and trade discounts.
30. Prepare sales, income, and various other tax reports for local, state, and federal governments.
31. Prepare a schedule for cost of goods sold and a statement of owner's equity given appropriate data.
32. Prepare a complete payroll including the recording of the necessary entries in the proper journals.
33. Demonstrate the various recording techniques involved in promissory notes, converting accounts receivable or payable notes, discounting notes, and payment of defaulted notes.
34. Post to the subsidiary ledgers, accounts receivable and accounts payable, and apply verification principles in the process.
35. Prepare depreciation schedules on fixed asset records.
36. Define journalless bookkeeping.
37. Define ledgerless bookkeeping.
38. Record the purchase and sale of a corporation.
39. Record the incorporation or dissolvement of a business.
40. Calculate and record entries relating to dividends; preferred and common, participating and cumulative.
41. Calculate and prepare amortization in relation to bonds and journalize those calculations in the appropriate journals.
42. Describe computer applications relating to payroll, accounts receivable, inventory, accounts payable, general ledger, and financial statements.
43. Complete a practice set which incorporates complete accounting theory; i.e., systems and procedures with payroll, depreciation, notes, accruals, and deferrals, with adjusting entries and special journals.
44. Prepare financial statements using previous fiscal period reports for reference.
45. Prepare payroll records 100 percent accurate.
46. Do routine financial transactions; i.e., petty cash, deposits, and bank statements.

47. Operate a calculator or an adding machine and have the ability to learn the operation of a machine used in preparing accounting records.
48. Journalize a variety of transactions involving assets, liabilities, equity, expense, and revenue accounts using the double entry system.
49. Enumerate the steps in the accounting cycle beginning with journalizing and terminating with the post-closing trial balance.
50. Utilize appropriate accounting ratios (current ratio, debt ratios, working capital ratios, percentages, etc.) in the analysis of pertinent data.
51. Analyze the data obtained in ratio analysis to facilitate the operation of a business.

DATA PROCESSING OBJECTIVES

THE STUDENT WILL BE ABLE TO:

52. Take unprocessed data, define the desired end result, and specify the steps needed to obtain that result.
53. Specify which type of processing would best handle a specific situation (manual, mechanical, electromechanical or electronic).
54. Identify problems encountered in adapting a system or changing to a different system.
55. Explain the difference between hardware and software.
56. Explain the general functions of any computer system.
57. Explain characteristics of widely used computer languages; i.e., cobol and fortran.
58. Explain the role of any periphial in a computer system.
59. Explain specific problems that may be encountered, either mechanical, electronic, or in the program.
60. Describe how management uses data processing data in operations and statistically.
61. Describe the internal working of a computer; i.e., binary, magnetic tape and transistors.
62. Explain the difference between analog and digital computers.
63. Translate any six digit number into a binary number.
64. Label source, compiler, and object program printouts.
65. Write a source program for a given problem.
66. Identify data processing operations.
67. List at least seven input media in a data processing environment.
68. Perform a card layout given necessary data.
69. Punch and verify cards given necessary data.

70. Identify important parts of any periphial equipment.
71. Explain what to do in case of a card jam in any periphial equipment.
72. Identify the type of processing that would most adequately handie a given situation.
73. Keypunch by touch new or other data in 80 or 96 column cards on each card with 95 percent accuracy on a 10 minute timing.
74. Identify four types of punched cards and give reasons for the specific designs.
75. Name four source documents.
76. Add, subtract, multiply, or divide four-digit binary numbers.
77. Define, write, and run a computer program solving a given problem
78. Label 10 flow-chart symbols and describe or illustrate a purpose for each.
79. Identify logically-and illogically-written flow charts.

FILING, OFFICE MACHINES, AND GENERAL OFFICE CLERICAL

FILING, OFFICE MACHINES, AND GENERAL OFFICE CLERICAL—U. S. Office of Education Classification 14.03.

Work Activities in this group include basic simple record keeping, handling mail, filing, answering the telephone, acting as receptionist, copying, billing, using various business machines, typing simple routine items (labels, bills, reports, etc.), and operating mailing machines and duplicators.

General Worker Requirements Ability to deal with public; an adherence to detail and routine in examining and adjusting claims and records; collecting and tracing accounts; and quoting prices. The worker must be concerned with performing service work to the business and to the customers.

This division includes classifying, sorting and filing correspondence, records, and other data.

Examples of initial entry jobs:

1. Duplicating Machine Operators
2. File Clerks
3. General Office Clerks
   a. Insurance Clerks—Control Clerk (insurance)
   b. Contract Clerks—(automobile)
   c. City Collection Clerks—(banking)
   d. Clerks—(telephone service)
   e. Demurrage Clerks—(transportation)
   f. Control Clerks—(data processing, clerical)
   g. Flight-Crew-Time Clerks—(air transportation)
   h. Crew Scheduling—(transportation)
   i. Media Clerks—(business service)
   j. Mortgage Accounting Clerks
   k. Raters—(insurance)
   l. Statistical Clerks—(advertising)
   m. Tax Clerks
   n. Checking Clerks
4. Transcribing Machine Operators
5. Collectors
6. Direct Service Clerks

Advanced jobs:

1. Office Managers
2. Office Supervisors
3. Secretaries
4. Stenographers
5. Coordinators

COMPETENCIES--FILING, OFFICE MACHINES, AND GENERAL OFFICE CLERICAL

The following competencies have been identified by business educators, business supervisors and administrators, and business employees as being necessary for this particular area:

THE STUDENT WILL BE ABLE TO:

1. Operate a full-keyboard, adding-listing machine for three minutes at a minimum rate of 100 digits per minute with a maximum of three errors.
2. Operate a ten-key adding machine with the touch system for three minutes at a minimum rate of 100 digits per minute with a maximum of three errors.
3. Operate a ten-key printing calculator with the touch system for three minutes at a minimum rate of 75 digits per minute with a maximum of three errors.
4. Operate an electronic calculator at a minimum rate of 60 digits per minute involving the four different mathematical functions for three minutes with 90 percent accuracy.
5. Operate an electronic calculator utilizing the four mathematical functions involving a given set of problems with 90 percent accuracy.
6. Post mechanically a minimum of 50 ledger cards of one posting date per hour with 90 percent accuracy.
7. File alphabetically a minimum of 100 pieces of correspondence per hour with 95 percent accuracy.
8. Demonstrate the ability to obtain information for the answers to 20 given questions within an hour, using common office reference sources.
9. File, index, and retrieve materials using alphabetic, geographic, numeric, or subject methods.
10. Identify and set up an appropriate filing system to use in any given situation.
11. Enumerate the advantages and disadvantages of the various filing systems; i.e., alphabetic, numeric, geographic, and subject.
12. Prepare materials for filing.
13. Match a minimum of 25 listed descriptions of materials under the proper name of a subject folder in 10 minutes.
14. Arrange a mixed deck of 3 x 5 index cards in chronological order at the minimum rate of 10 cards per one minute.
15. Assemble, punch holes, and staple three page sets of material at the minimum rate of five sets per minute.

16. Compose simple business correspondence using correct grammar, spelling, punctuation, and business vocabulary.
17. Proofread and annotate copy using correct proofreader's marks and be able to type a correct copy from a rough draft.
18. Demonstrate proficiency in performing basic arithmetic calculations and be able to compute such items as simple payroll, invoice extensions, interest, and discounts.
19. Demonstrate the ability to perform simple record keeping tasks such as routine journalizing, posting, and petty cash reports.
20. Prepare copy for and efficiently operate all types of duplicating machines.
21. Distribute correctly all incoming and outgoing mail.
22. Layout and organize a personal desk for maximum efficiency in the flow of work.
23. Keep stock records.
24. Record sales slips and receipts.
25. Prepare simple budgets.
26. Keep petty cash records.
27. Prepare deposits, write checks, and reconcile bank statements.
28. Make proper and accurate cash receipts.
29. Determine proper postage requirements.
30. Duplicate 250 copies of a prepared master or stencil with proper tone, alignment, balance, and other traits of appearance within five minutes.
31. Demonstrate the ability to do handwritten work in a neat, legible style.
32. Care for equipment--clean machines, change ribbons when necessary, change tape on adding machines, and replenish fluid or ink supply on duplicators.

INFORMATION COMMUNICATION

INFORMATION COMMUNICATION— U.S. Office of Education Classification 14.04.

Work Activities in this group involve those activites and occupations concerned with distribution of information and messages by mail, telephone, telegraph, and person. The activities primarily involve collecting information, checki g it for accuracy and consistency, and or relating or otherwise dispensing it to interested parties. The performance of clerical tasks, such as record keeping, is frequently involved.

General Worker Requirements Verbal facility; the ability to relate to people in order to tactfully acquire information and create good impressions in answering inquiries; exactness and attention to detail in reviewing records and avoiding errors; numerical ability for situations involving accounts and numerical records; and a liking for public contact work.

Examples of initial entry jobs:

1. Messengers and Errand Boys—(sorting and delivering packages)
2. Mail Clerks—(incoming and outgoing mail processing)
3. Telephone Operators—(switchboard and telephone connections)
4. Receptionists and Information Clerks—(answering questions for customers, employees, and other business executives, and making appointments)
5. Telegraph Operators—(operate transmitters and signal equipment)
6. Mail Preparing and Mail Handling Machine Operators—(address envelopes and accounting forms; fold, seal, and stamp mail)

Advanced jobs:

1. Foreman Mail Room—(general business)
2. Manager Delivery Department—(telephone and telegraph)
3. Meter Reader Chief—(heat, light, and power companies)
4. Training Supervisors—(general business)
5. Mail Distribution—(government)
6. Manager, Traffic—(motor transportation)
7. Medical Records Supervisor—(medical services)

COMPETENCIES--INFORMATION COMMUNICATION

The following competencies have been identified by business educators, business supervisors and administrators, and business employees as being necessary for this particular area:

THE STUDENT WILL BE ABLE TO:

1. Identify the appropriate media for communicating written messages.

2. Demonstrate the proper use of the dictionary and other reference materials effectively and efficiently.
3. Create and prepare oral presentations and visual displays which incorporate the basic principles of effective communication.
4. Demonstrate the ability to handle the difficult or complaining customer effectively in person or on the telephone.
5. Demonstrate verbally the ability to use business vocabulary.
6. Demonstrate ability to "sell" the company.
7. Demonstrate the ability to date, sort, and distribute mail.
8. Demonstrate the ability to obtain given information promptly, written and orally.
9. Identify all incorrect grammar, spelling, and punctuation in letters of common business vocabulary.
10. Demonstrate the ability to write different types of business letter communications as mailable examples of each and indicate the purpose of each paragraph.
11. Demonstrate the ability to write business reports and minutes of meetings that clearly present the facts as given through handwritten notes and other documents.
12. Dictate letters using the correct techniques for dictation.
13. Write, from a rough draft, communication which accurately reflects the content of that rough draft.
14. Communicate, by oral or written means, with customers concerning such matters as lost sales and unreceived merchandise.
15. Place or transfer conference calls.
16. Demonstrate the ability to distinguish between those persons or calls that should or should not be referred to a supervisor or manager.
17. Demonstrate the proper use of a teletype and explain the advantages and disadvantages.

STENOGRAPHIC, SECRETARIAL, AND RELATED

STENOGRAPHIC, SECRETARIAL, AND RELATED—U.S. Office of Education Classification 14.07.

Because of the confusion surrounding the titles of secretary, stenographer, and typist; the general definition of each title is given. This confusion results in part in that no two business offices are exactly alike, and the required duties may vary greatly. Generally:

The secretary is the highest skilled. She or he must be a capable stenographer and, in addition, must be able to relieve her employer of many of his minor executive duties. She or he assumes responsiblity without direct supervision and makes decisions within the scope of assigned authority.

The stenographer handles mail, opens and sorts mail, has a good background in shorthand in order to take dictation, transcribes shorthand, handles dictaphones and other tape recording machines, cuts stencils, answers telephone, and operates various duplication machines.

The typist is the least skilled of the three. She or he is proficient in typing and the duties are fairly routine in nature.

Working Activities in this group primarily involve performing such clerical tasks as taking dictation, typing, and assuming minor executive duties which relieve organizational officers from these responsiblities. The basic duties are taking dictation, either by hand or shorthand machine, and transcribing by typewriter from notes, or from a recording played on a transcribing machine. Other duties include making and reminding executives of appointments, interviewing and screening office visitors, answering and making telephone calls, and reading and writing routine correspondence.

General Worker Requirements Facility with words; ability to successfully perform work of a detailed nature and avoid errors; diplomacy and tact in dealing with people; ability to adapt to fluctuating situations, to form perceptions, to perceive differences in shorthand symbols, and to have motor coordination and finger dexterity for office machines.

This division encompasses programs related to occupations carrying out administrative and general office duties.

Examples of initial entry jobs:

1. Social Secretaries
2. Legal Secretaries
3. Medical Secretaries
4. General Secretaries—(clerical-business)
5. Court Recorders
6. Stenotype Operators—(clerical)

7. General Stenographer—(clerical)
   a. Legal Stenographer
   b. Medical Stenographer
   c. Police Stenographer
   d. Public Stenographer
8. Administrative Assistants in professional offices
9. Private Secretary
10. Certified Professional Secretary

Advanced Jobs:

1. Administrative Assistant
2. Executive Secretary
3. Clerical and Office Supervisors

COMPETENCIES—STENOGRAPHIC, SECRETARIAL, AND RELATED

The following competencies have been identified by business educators, business supervisors and administrators, and business employees as being necessary for this particular area:

THE STUDENT WILL BE ABLE TO:

1. Transcribe from belts, tapes, or records, mailable memos and reports for a period of 30 minutes at a minimum rate of 60 wpm.
2. Read orally from shorthand homework notes at a minimum rate of 90 words in a half minute.
3. Take dictation over unpreviewed, new material at a minimum rate of 80 wpm with 95 percent accuracy.
4. Transcribe for 30 minutes at a minimum rate of 40 wpm with 95 percent accuracy.
5. Transcribe mailable copies of letters dictated at a minimum rate of 80 wpm.
6. Demonstrate correct notebook techniques (crossed-out notes, dated pages, and elastic bands).
7. Find and correct all errors in his own work.
8. Demonstrate proper procedure in handling incoming and outgoing telephone calls and greet callers who come to the office in a businesslike and courteous manner.
9. Demonstrate written or orally an understanding of the place and purpose of the office in the typical business organizations.
10. Develop an awareness of the need for continuous skill development in order to reach standards of accuracy and speed required of beginning office workers.
11. Create a favorable impression by his or her behavior, attitude, and appearance.

12. Demonstrate a critical attitude toward the finished product with emphasis on accuracy and appearance.
13. Develop a job-centered approach to development of businesslike work habits and attitudes and effective human relations.
14. Identify the positive and negative features of a secretary's appearances.
15. Identify the positive and negative features of business telephone techniques.
16. Identify and use reference materials and handbooks.
17. Develop an understanding of the problems of management, including the common daily problems of the immediate supervisor.
18. Demonstrate office insight by the handling of a variety of forms by following detailed instructions, and by working on typical office problems requiring organization of materials.
19. Utilize efficient judgment in solving given problems connected with business situations.
20. Identify the advantages and disadvantages of various mail handling routines.
21. Calculate postage rates.
22. Recognize and complete common business forms; i.e., expense reports, requisitions, payroll vouchers, and interoffice communications.
23. Code, cross-reference, and file business papers and correspondence.
24. Identify and explain the tasks a secretary must perform in planning an itinerary.
25. Compose a mailable business letter illustrating the essentials of good form and composition.
26. Demonstrate the ability to write dictated words using the correct character, prefix, suffix, abbreviation, and or principle.
27. Demonstrate the understanding of business vocabulary through application in business correspondence.
28. Receive visitors courteously and in a businesslike manner.
29. Give appropriate information to a visitor or direct to a proper source.
30. Order supplies in order to keep adequate inventory in ribbons, correction fluid, erasers, and other office supplies.
31. Prepare business reports in appropriate typewritten form.
32. Perform mathematical functions connected with records; i.e., payroll vouchers and requisitions.
33. Record all necessary transactions with 95 percent accuracy.
34. File documents according to a given filing system; i.e., alphabetic, numeric, subject, and geographic.
35. Cross-reference records or files according to established filing routines.

36. Operate the mimeograph machine.
37. Operate the photocopy machine.
38. Properly care for the various machine; i.e., adding machine, typewriter, and dictaphone.
39. Choose and utilize the appropriate media for communicating messages.
40. Demonstrate the ability to concentrate and work accurately in an office situation.

SUPERVISORY AND ADMINISTRATIVE MANAGEMENT—U.S. Office of Education Classification 14.08.

Work Activities in this group involve supervising and coordinating the activities of personnel engaged in clerical, sales, and related work. Learning activities and experiences are concerned with responsiblities in analyzing policies, organizational structures, and practices; reviewing budgets; preparing budgets; preparing reports—both financial and general—; supervising and coordinating activities and work procedures; and assigning various office duties.

General Worker Requirements Ability to become familiar with one or more clerical or sales activities; ability to plan ahead and make assignments in a manner which promotes and coordinates activities; and the ability to complete individual tasks according to established priorities. Verbal ability to communicate effectively orally and in writing with superiors and subordinates; clerical aptitude to detect errors in correspondence, statistical tabulations, price lists, and inventory records; ability to investigate people and to work cooperatively and conscientiously in activities which are frequently routine and repetitive; the ability to perform work done by subordinates and to train new employees when required.

This division encompasses the coordinating, expediting, and facilitating functions of the office, and includes discharge of duties related to personnel, budget and financial records, conducting studies and analysis, and reviewing reports.

Examples of jobs:

1. Budget Officer
2. Supervisor—all types according to type of work supervised
3. Administrative Assistant
4. Chief Clerk
5. Office Manager
6. Disbursement Clerk
7. Operations Officer—(banking)
8. Manager Safe Deposits
9. Bank Cashiers
10. Interviewer and Claims Adjuster
11. Manager, credit and collections

COMPETENCIES—SUPERVISORY AND ADMINISTRATIVE MANAGEMENT

The following competencies have been identified by business educators, business supervisors and administrators, and business employees as being necessary for this particular area:

THE STUDENT WILL BE ABLE TO:

1. List the various types of business organizations with particular reference to those of the local community and describe their relationship to the local economy.
2. Enumerate the legal and financial problems involved in organizing a business.
3. Describe the role that sound management principles play in the successful operation of the various types of businesses.
4. Outline the procedure involved in the organization of a business enterprise.
5. Analyze and compare the American economic system of private enterprise.
6. Explain the importance of business ethics.
7. Explain the role of money and credit in business operations.
8. Enumerate procedures for safeguarding the investments of business.
9. Describe business cycles.
10. Outline characteristics of various management strategies; i.e., scientific methods and human relations.
11. Describe generally the use and importance of behavioral research studies on the management process.
12. Present the concept of management as a process.
13. List various duties of a manager with respect to managerial duties and non-managerial duties.
14. Analyze management activities such as planning, organizing, directing, and controlling.
15. Develop a plan of activities for various case studies involving specific manager problems; i.e., finance, marketing, and personnel.
16. Structure organization types for specific companies and support reasons for basic organizational design.
17. Outline general approaches for motivating and directing people within the management process.
18. Establish a scheme of measuring company results within a company using that industry as a norm and review established standards of performance within companies from those results.

19. Establish a possible plan of action that would result in a checking procedure for performance of a company.
20. Identify levels of management and describe basic functions for those levels; i.e., low, middle, and high management levels.
21. List and explain elements of effective leadership within an organization.
22. Establish informal and formal lines of communication within various levels of management and with the rank and file worker.

TYPING AND RELATED—U.S. Office of Education Classification 14.09.

Work Activities in this group involve recording or transmitting verbal and coded material by the use of office machines such as typewriters, teletypewriters, type perforators, Braille machines and telegraphic keys.

General Worker Requirements Attentiveness to detail to avoid errors in transferring dates from records or draft copies; motor coordination and finger dexterity; adaptability to repetitious work; and willingness to work under the direction of others.

This division encompasses the performance of general clerical work requiring the use of a typewriter in a majority of duties; such as compiling and typing reports, application forms, business forms, letters with envelopes, tabulations, and manuscripts. Other related duties include sorting mail, answering telephone, filing, sorting, posting, and computing with adding machines.

Examples of initial entry jobs:

1. Junior Clerk Typists
2. Senior Clerk Typists
3. Receptionists
4. Transcribing Machine Operators
5. Stenographers
6. Teletype Operators
7. Vari-type Operators
8. Data Processing Typists
9. Key-Punch Operators
10. Flexowriter Operators
11. Policy Typists
12. Telefax Clerks

Advanced Jobs:

1. Typing Section Chief
2. Telegraphic—Typewriter Operator Chief
3. Typing Pool Supervisor or Coordinator

COMPETENCIES—TYPING AND RELATED

The following competencies have been identified by business educators, business supervisors and administrators, and business employees as being necessary for this particular area:

THE STUDENT WILL BE ABLE TO:

1. Take reasonable care of the typewriter and organize work stations.

2. Maintain typewriter in working condition: change ribbons, clean and oil the machine when necessary.
3. Keep work area clean and orderly.
4. Identify the functions of principal parts of the machine; i.e., margin settings, line finders, card holders, paper guides, tabulator keys, bail holders, variable line finder, and paper release.
5. Complete production work on both manual and electric typewriter by determining similarities and differences between two types of machines.
6. Demonstrate and practice proper procedures for: inserting papers, proper position at machine, and key striking on both electric and manual.
7. Determine procedure for selecting proper ribbons for various machines and also the procedure for changing ribbons.
8. Establish an enumerated pattern in steps before typing production work; i.e.,
    a. check paper guide
    b. line space regulator
    c. margins
    d. paper bail
    e. insert and straighten paper
    f. adjust top margins
9. Determine cause of key jams and procedure for untangling type bars on both manuals and electric machines.
10. Determine the mechanical function of margin settings, the margin bell, and the absolute end of line.
11. Determine home row, alphabetical keys, symbol keys, shift keys, and division of keys for each finger according to charts.
12. Be aware of kinds of machines being used in business organizations and styles of type available.
13. Properly demonstrate horizontal and vertical centering.
14. Develop the proper technique of handling typewriting extras; i.e.,
    a. erasing
    b. aligning letters
    c. crowding and spreading of keyboard letters
    d. reinserting of paper for additions or continuation
    e. guide for work division
    f. review of rules for punctuation, spacing, and capitalization
    g. rules for day, dates, and time of day
    h. rules for typing numbers, symbols, and page numbers
    i. pivoting
    j. abbreviations
15. Associate revision or proofreaders marks with proper meanings.

16. Adjust machines for properly typing superior figures or to construct symbols or characters which are not represented by a single key.
17. Properly divide words at end of typing lines according to prescribed acceptable English rules.
18. Define syllable intensity and determine purpose.
19. Determine dollar and number alignments in formal and informal typing.
20. Properly type fractions, both key fractions and made fractions.
21. Distinguish the difference between Pica and Elite machines, vertical and horizontal centering, margin setting, and spacing.
22. Determine needed supplies for general office typing and general machine maintenance.
23. Type 40 wpm (words per minute) with an error tolerance of one error for every minute of typing. Speed is calculated only to the fifth error on 5-minute writing.
24. Given the necessary office supplies, complete 12 mailable copies with envelopes in one hour.
25. Given the appropriate office supplies, type various letters and envelopes and arrange letters in various styles with open or mixed punctuation at the rate of 40 to 50 words per minute with 95 percent accuracy.
26. Given the appropriate office supplies, develop skill setting up and typing a simple tabulation problem, without subtitles or column headings so that in a forty-minute test, five "acceptable" tabulation probelms will be completed (unacceptable—typographical errors, misspelled words, form errors, poor corrections).
27. Given the appropriate office supplies, develop skill setting up and typing a tabulation with subtitles and column headings so that in a forty-minute test, three "acceptable" tabulation problems will be completed (unacceptable—typographical errors, misspelled words, form errors, poor corrections).
28. Given the appropriate office supplies, type tabulations of various difficulty at 30 to 40 words per minute with 95 percent accuracy.
29. Given the appropriate material, type an "acceptable" four-page manuscript without footnotes from rough draft in a forty-minute test (unacceptable—typographical error, misspelled words, form errors, poor corrections).
30. Given the appropriate materials, type an "acceptable" three-page manuscript with footnotes from rough draft in a forty-minute test.
31. Given the appropriate materials, type manuscripts of various difficulty and form at 40 to 45 words per minute with 95 percent accuracy.

32. Determine side margins for unbound, left-bound, and top-bound manuscripts.
33. Use designated top and bottom margins for the first and succeeding pages of a manuscript.
34. Properly space various parts of a manuscript; title, side headings, paragraph headings, quotations, and footnotes.
35. Organize, systematically arrange, and type an outline for a manuscript.
36. Logically organize and correct by type a manuscript from a rough draft.
37. Given the appropriate materials and office supplies, correctly type postal cards, invoices, purchase orders, interoffice memos, office reports, itineraries, etc., at 30 words per minute with 95 percent accuracy.
38. Type an exact copy of material from rough draft, with enumerations.
39. Type outlines using proper spacing with titles, subtitles, Roman numerals, and Arabic subdivision.
40. Type open tabulations with title, subtitle and column headings on different size paper following the proper rules for spacing, centering, underscoring, capitalizing, and machine adjustment in order to attractively display tabulated material from rough draft work.
41. Use the backspace and space-over method (backspace once for every two letters) to center titles, subtitles, set left margin, set tabs, and center column headings over columns in standard tabulation problems.
42. Use the calculation or arithmetic method (count total spaces required in tabulation, subtract from spaces available, divide by two to get left margin, etc.) to set left margins, set tabs, and center columns in standard tabulation problem.
43. Type various types of tables (open, ruled, and box) with carbon copies, making the necessary erasures and corrections on all copies.
44. Demonstrate the basic types and styles of letters; i.e., blocked, modified block, indented, full block, indented semiblocked, and personal.
45. Identify the parts of a letter; i.e., date, inside address, salutation, body, close, and reference initials; and determine the spacing rules involved.
46. Set up and type special letter notations; such as attention line, subject line, enclosures, carbon copy notation, blind carbon copy notations, and postscript notations.

47. Distinguish between full, open, and mixed punctuation; and the appropriateness of each punctuation style with letter styles.
48. Complete the typing of various size addresses on all the different size envelopes.
49. Make carbon copies of letters of various styles with various special notations.
50. Make corrections on original letters.
51. Make corrections on carbon copies of letters.
52. Type unusual letter styles; such as hanging indented, display paragraph, simplified (A.M.S.), and square blocked.

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